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Improved Method for Pouring Rodac Plates

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The Rodac plate (Falcon Plastics, Los Angeles, Calif.) was originally described by Hall and Hartnett (2) for use in direct contact sampling for surface contamination. The Rodac plate has found wide acceptance and use in a variety of areas where sanitation and contamination level are important, particularly in institutional areas, such as hospitals and food production and service facilities (1; R. G. Bond et al., *unpublished data*). The use of Rodac plates for surface sampling can be valuable in the field because of its simplicity, reliability, and transportability, particularly in estimating the bacterial contamination on flat surfaces. Constant use of Rodac plates has been required in the Clean Assembly and Sterilization Laboratory in determining the contamination level and housekeeping reliability in a laminar flow room and adjacent service areas.

This method of preparation is facilitated by utilization of laminar flow conditions. A brass plate measuring 21 by 46 inches (53 × 117 cm) was fabricated to exactly fit a laminar flow bench. A copper coil was firmly soldered onto one side of the plate. Cold water was supplied to the coil by easily detachable, flexible plumbing (Fig. 1). Prior to pouring, the plate was placed onto the work surface of the laminar flow bench and sanitized. Cold tap water was circulated through the copper coil to chill the plate. A measured amount (17 ml, final volume) of the selected agar fortified with 0.5% additional agar (2% total agar) was sterilized in individual test tubes. When tempered to 45 to 47 C, the agar from a single tube was poured carefully into an open Rodac plate placed on the cold surface (Fig. 2). Very rapid solidification enhanced the formation of the meniscus. After solidification, the tops of the dishes were carefully dropped in place. A large number of plates can be prepared quickly and easily by this method.

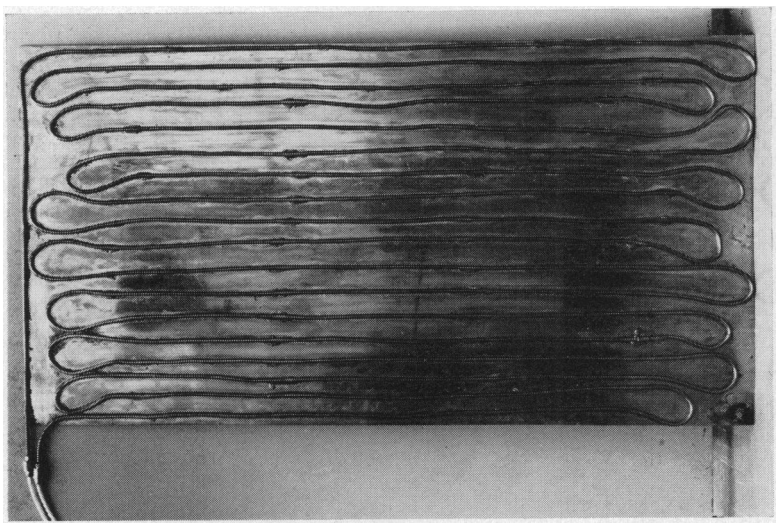

FIG. 1. *View of the bottom of the brass plate, showing the attachment of the copper coil.*

Use of the laminar flow bench essentially eliminates concern about contamination. An automatic pipetter is commonly used in the preparation of Rodac plates. Prior apportionment, sterilization, and tempering of the agar eliminates the difficulties encountered with automatic pipetting. In addition, this method will allow flexibility in the use of a variety of media at one time. The meniscus of each Rodac plate should be examined, defective ones discarded, and the re-

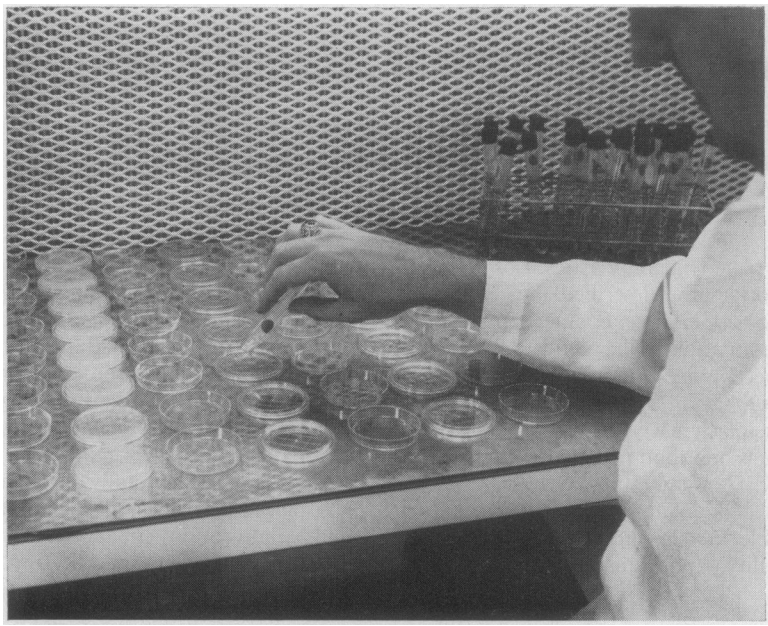

FIG. 2. *The brass plate in use in a laminar flow bench during the preparation of Rodac plates.*

mainder incubated prior to use to detect any adventitious contamination.

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